

**COMBINED DECLARATION AND POWER OF ATTORNEY**

As a below-named inventor, I hereby declare that:

The residence, post office address, and citizenship are as stated below next to my name;  
and

I verily believe that I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled **PLANAR LIGHTWAVE CIRCUIT FOR CONDITIONING TUNABLE LASER OUTPUT**, the specification of which is filed herewith.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim, as amended by any Amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 C.F.R. §1.56.

I hereby claim foreign priority benefits under 35 U.S.C. §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of any application on which priority is claimed:

Country	Number	Date Filed	Priority Claimed (Y/N)
_____	_____	_____	_____
_____	_____	_____	_____

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below:

Application Number(s)	Filing Date (MM/DD/YYYY)
60/272,623	03/01/2001

**PATENT**

**Docket No.: PAT024US**

I hereby claim the benefit under 35 U.S.C. §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of 35 U.S.C. §112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

**Application  
Serial No.**

**Filed**

**Patented or  
Pending**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I hereby appoint **N. Stephan Kinsella**, Registration No. 37,657 of **APPLIED OPTOELECTRONICS, INC.**, 13111 Jess Pirtle Blvd., Sugar Land, Texas 77478, to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith, and

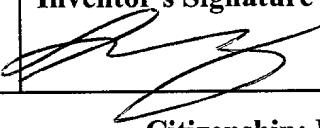
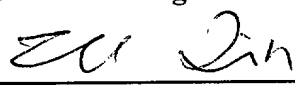
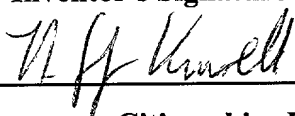
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I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

PATENT

Docket No.: PAT024US

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**PLANAR LIGHTWAVE CIRCUIT FOR  
CONDITIONING TUNABLE LASER OUTPUT**

**ABSTRACT**

5           A planar lightwave circuit (PLC) module for conditioning light output from a tunable laser designed to generate light at a target wavelength. The PLC module has a substrate; a primary waveguide embedded in said substrate, said primary waveguide having an input end for receiving light from the tunable laser and an output end for outputting said light; and at least a first secondary waveguide embedded in said substrate, said first secondary waveguide receiving a first portion of  
10       said light from the tunable laser. A filter having a passband centered on the target wavelength is coupled to an output of the first secondary waveguide to receive said first portion of light, and generates a signal related to the intensity of said first portion of light in the passband centered on the target wavelength. This may be used by a processor and associated laser control circuitry for wavelength locking purposes.